Chapter 11

Reporting and Using Evaluation Findings

Previous chapters of this *Guide* described strategies to help Even Start projects produce useful information for documenting literacy outcomes and improving program practices. The next step is to ensure that the overall evaluation findings are communicated in a manner that encourages Even Start staff and other stakeholders to use them. This chapter covers:

- maximizing the use of evaluation findings;
- the written evaluation report;
- levels of evaluation reporting;
- organization and content of reports;
- enhancing presentations of evaluation findings; and
- reporting data analyses.

## **Maximizing the Use of Evaluation Findings**

Although evaluation is usually just one factor that influences program decisions, the evaluator should ensure that evaluation findings are presented in a way that makes them useful and able to inform decision making. Evaluators should consider the following points in planning for evaluation use:

**Audiences.** The first step to a useful evaluation is to identify its primary audience. Even Start project staff, partners, key collaborators, and advisory boards responsible for project management and implementation are the primary Even Start audience; they are most likely to act on the evaluation findings (e.g., increase the intensity of a program component, revise curricula, schedule staff development opportunities, improve data collection procedures). Another key information user is the SEA Even Start coordinator, who uses the findings to monitor program progress, make continuation funding decisions, and determine technical assistance and training needs.

**Tailored presentation of findings.** To maximize their use, evaluators need to tailor their presentation of findings to address what the intended audience wants or needs to know. Different audiences have different information needs and tolerance levels for details. Program staff may be interested in outcome data analyses that explore differences by subgroups or patterns based on program implementation, while state coordinators may simply want to know the percentage of participants who met state performance indicators.

**Length of report.** Evaluators who present findings without considering the needs or expectations of their audience often present too much information. A key deterrent to using evaluation findings is the mass of material that readers must wade through in order to answer their questions or find information of interest. Because the complete technical report chronicles all evaluation activities and findings, it can be effectively streamlined by including supporting information or additional analyses in appendices. Shorter evaluation progress or interim reports and executive summaries can effectively communicate "need to know" findings to most potential users.

Chapter 11 Reporting and Using Evaluation Findings

**Clear messages.** Simplicity and clarity should guide reports of evaluation findings; avoid evaluation jargon and use everyday language. Represent data visually to highlight key findings.

**Availability of findings.** Timing is everything. Evaluation results that are ready when they are needed are far more likely to be used. Evaluations that address the right issues but arrive "after the fact" may be irrelevant. Evaluators need to balance the thoroughness of their data collection and analysis with the need to deliver accessible findings in a timely manner. "Timely" does not necessarily mean "fast"; rather, it calls on the evaluator to adjust the evaluation schedule so that findings are ready when they will have maximum impact. This may require interim reports or progress memos as needed to inform decisions.

## **The Written Evaluation Report**

Programs should require their independent evaluator to produce a written report of findings and recommendations for improvement. Although there are many options for disseminating evaluation findings, a written report is the most comprehensive format for presenting participant outcomes, answering key evaluation questions, and analyzing data collected from various information sources. Further, a written report has value as a "stand alone" document which serves several important functions:

**Accountability.** The written report shows evidence of program effectiveness in addressing the state performance indicators and program objectives, and documents compliance with the federal statute. The medium of print formalizes the evaluation and adds credibility and authority to the presentation of evaluation findings.

**Historical context.** Evaluation reports create a historical record documenting the population served, participant and program accomplishments, and changes in program design over time. This documentation provides an historical perspective and ensures program continuity in cases of staff, evaluator, and/or administrator turnover.

**Educating and informing others.** The written report promotes understanding. Audiences who are unfamiliar with the Even Start program can use the evaluation report to gain a better understanding of program goals as well as the specifics evaluated e.g., the community context, population profile, program services, and unique features of the Even Start program.

**Advocacy and support.** By documenting project accomplishments and participant outcomes, the evaluation report is a valuable resource for generating support for Even Start family literacy programs. Evaluation findings can educate policy-makers about the effectiveness of the Even Start model, encourage new collaborations, and enhance program services and operations.

# **Levels of Evaluation Reporting**

The three levels of the written evaluation report are distinguished by the amount and type of information presented, intended audience, and potential use. They are (1) Technical Report, (2) Interim Reports or Progress Memos, and (3) Executive Summary.

The **Technical Report** is the most comprehensive compilation and presentation of information generated by the evaluation. The technical report is often written as an end-of-year report for Even Start programs and is used to meet all of the functions described in the preceding section. Although the technical report is the most informative of all reporting formats, its length and detailed presentation of data tend to limit its audience to the primary users, i.e., Even Start staff and others who implement programs.

**Interim Reports or Progress Memos** meet the specific information needs of project staff during the course of the project year. Progress reports may also be required by state coordinators and others who monitor program implementation. Interim reports or progress memos are most useful for:

- reporting progress in achieving participant outcomes (e.g., percentage of participants who have achieved project-specified benchmarks related to the state performance indicators at mid-year);
- describing accomplishments and challenges in program operations at a specific time (e.g., number of families served and retention rate, identification of effective strategies to guide staff recruitment efforts); and/or
- presenting findings on a specific area of concern (e.g., results from a parent satisfaction survey on the need to improve program services).

Interim reports or progress memos are typically brief. Depending on the audience and purpose of the report, they can present data formally or informally. Interim reports or progress memos maximize the use of evaluation findings because they have a limited focus and emphasize "need to know" data that are provided while the project is operating and staff or others can take immediate action.

The **Executive Summary** is the short version of the technical report. It communicates essential information about the study's purpose, design, and key findings without burdening the reader with the complete report. State reporting requirements may specify the length and desired content to be covered. A comprehensive executive summary should contain condensed information from all the major sections of the technical report. It should be written as a stand-alone document that can be included with the technical report or reproduced separately and disseminated as needed.

More focused executive summaries can address an audience's specific information needs (e.g., state coordinators might request an executive summary of project status with respect to the state performance indicators). Evaluators may need to develop two to three versions of executive summaries, each highlighting the findings of most interest to a given audience.

## **Organization and Content of Reports**

Evaluation findings may be presented in a variety of formats—written reports, oral presentations, and discussions with question/answer interactions. The example below identifies information that may serve the written evaluation report as well as other avenues for reporting Even Start evaluation results. The sample Table of Contents below is followed by more detailed descriptions of information each section of the report could contain. Section headings refer to sections of the sample evaluation report.

## Example: Even Start Evaluation Report Table of Contents

### I. Program Description

Program Goals

Program Services

Partnership Entities and Key Collaborators

Participant Profile

Staffing

Response to Previous Year's Recommendations

## II. Study Design

State Performance Indicators/Participant Outcomes

Project Objectives

Evaluation Focus and Key Evaluation Questions

Evaluation Design: Data Sources, Sample, and Methods

#### III. Evaluation Findings

Participant Outcomes: State Performance Indicators

Other Participant Outcomes

Program Participation: Attendance and Retention

Findings Related to Key Evaluation Questions

Interpretation/Discussion of Findings

#### IV. Conclusion and Recommendations

Summary of Findings

Progress based on Previous Year's Recommendations

Recommendations for Improvements

#### **Appendices**

Instruments

**Part I: Program Description.** Information about a program's goals, services, and characteristics of the participants served is essential for ensuring that all readers understand the context of the program being evaluated. This information also helps the reader interpret the evaluation findings. We recommend that all presentations of evaluation findings begin with a program description (one to two pages in the technical report) or highlights of program features (Executive Summary or PowerPoint presentation). The table on the next page presents key content the program description could include.

| Example: Pr                 | rogram Description   |
|-----------------------------|--|
| Program<br>Goals            | The CV Even Start Family Literacy program completed its fourth year of operation as a cooperative effort between the Library and its co-applicant, the School District. The Even Start program goal is to improve the educational opportunities of families by 1) helping parents become full partners in the education of their children, 2) assisting children in reaching their full potential as learners, and 3) providing workforce and literacy training for parents.   |
| Program<br>Design           | The program design incorporates aspects of both a home-based program and the Kenan Family Trust center-based model. As part of the center-based program design, parents attend adult education classes while their children attend a Head Start preschool program or an enriched childcare program, which is available for children ages birth to 5. Parents also participate in parent education class/support groups and parent-child interactive literacy activities. Families receive instructional support services twice a month during home visits. |
| Program<br>Services         | An intensive year-round program, CV Even Start offers 600 hours of ESL instruction and 300 hours of GED preparation. The Head Start preschool program offers 800 hours of early childhood education. Families may also participate in 150 hours of parenting-related classes or activities over the course of the project year.  |
| Partners &<br>Collaborators | The Library serves as the fiscal agent and provides a variety of services for staff and participants, including free book distribution, individualized tutoring, and small group literacy instruction. The district supports the program by providing facilities, staff training, and early childhood education programs. The co-applicants established a collaborative agreement with the High School District Adult School for adult education services and childcare.   |
| Participant<br>Profile      | The project serves low-income, Hispanic families living in the attendance areas of three elementary school schools: VS, LV, and HS. During the 2002-03 school year, the project served a total of 32 families (32 adults and 48 children). Of the families enrolled in the Even Start program, three (7%) received TANF and four adults (10%) were employed. Nearly two-thirds of the families (61%) reported living on an annual income of \$19,999 or less. None of the adults possessed a high school diploma.  |
| Staffing                    | A full-time family literacy director coordinates the program. The program is staffed by three instructors responsible for developing and delivering the home-based instructional programs. Instructional staff (provided through in-kind contributions) includes ESL/GED instructors (Adult School) and preschool teachers (Head Start). All instructional staff members possess the minimum required qualifications for their positions.  |
| Unique<br>Features          | The program is designed to serve the literacy and employment needs of families participating in the Welfare-to-Work program and offers individualized services to accommodate the schedules of working adults.   |

**Part II: Study Design.** This section describes the key features of the evaluation plan. It should include information on the study's goals, focus, assessments, and data collection design. The description of the study's design helps the reader determine whether the evaluation was methodologically sound and likely to produce credible findings. This section of the technical report may be brief (3-4 pages) but should include sufficient information to communicate:

- Purpose of the evaluation study (e.g., evaluation goals, target audience and expectations for how the data are to be used, reference to evaluator/agency conducting the study);
- State performance indicators, project objectives, and other participant outcomes (e.g., lists, summaries, or references to participant outcomes that are the focus of the study);
- Focus area(s) of inquiry (e.g., focus area(s) and project-identified evaluation questions to be answered as part of the study); and
- Data collection plan (e.g., assessments used to measure outcomes and gather information related to evaluation questions, sample, methods for data collection).

**Part III: Evaluation Findings.** The findings section of the evaluation report presents analyses of the data and describes findings on family participation patterns, participant outcomes, and evaluation questions. (Suggestions for analyzing and reporting specific types of data are provided in Chapters 3-7 of this *Guide*.) The findings section is also the appropriate place in the report for the evaluator's comments on the quality of the data and any background information that may help the reader understand issues that may have affected data accuracy or completeness (e.g., due to a late start-up date, the project is reporting pre-/post-test data based on five months of program implementation). See below in this chapter for a discussion of presentation of findings.

**Part IV: Conclusion and Recommendations.** The final report should close with a conclusion and recommendations for improvement. The conclusion concisely summarizes key findings, answers the key evaluation questions, and draws conclusions about the program's effectiveness in achieving outcomes and state performance indicators. As stated above, evaluators are encouraged to be brief and to present their summary statements clearly and simply. Presentations of evaluation findings should end with a conclusion (one to two pages in the technical report) or summary statements (Executive Summary or PowerPoint presentation). The example on page 106 shows key content the conclusion could present.

**Recommendations for Improvement.** All Even Start evaluation reports should include recommendations for improvement. They are the formal link between evaluation findings and their use for program improvement by staff and others. Methods for developing recommendations are varied and reflect the extent to which staff and other stakeholder have been involved in the

## Example: Recommendation for Improvement

Comparisons of students' mean pre- and post-test CASAS reading scores show little evidence of student growth in reading. The ABE Performance Indicator states that 50% of students will make a three-point post-test gain on the CASAS reading sub-test. Only one student (6%) achieved the performance indicator.

In response to last year's recommendations for improvement, the program increased the number of instructional hours offered in adult education. Currently the class offers 225 hours of instruction; students attended an average of 135 hours (60% attendance rate).

It is recommended that the program increase the intensity of the adult education program offerings to a minimum of 60 hours a month and develop incentives to encourage students to attend more consistently. The adult education teacher may also wish to review the adequacy of the current reading curriculum for adults with learning disabilities and examine lesson plans to ensure that sufficient time is allocated to reading activities.

| Example: Conclusion                            |   |  |  |  |
|--|---|--|--|--|
| Project/<br>Family<br>Summary                  | The Even Start program has successfully operationalized the four components of family literacy in a home- and center-based program and served a total of 50 families (50 adults and 80 children) during the 2001-2002 school year. These families represent an extremely high need population: average family income is less than \$11,000; fewer than half the adults have completed nine years of schooling; and one-third of the children between birth and age 3 have been diagnosed with severe developmental disabilities.                |  |  |  |
| Attendance/<br>Retention<br>Summary            | The family retention rate for the school year is 75%, including seven adults who achieved their goals and graduated from the program. This highly intensive program provides almost 650 hours of ESL instruction and over 300 hours of parenting-related classes or activities. Most families met the program expectation that they would attend a minimum of 70% or more of the classes offered within each component.   |  |  |  |
| Performance<br>Indicator<br>Status             | Findings from the fourth-year evaluation study showed that, with the exception of the indicator related to GED attainment, participants met and exceeded the state performance indicators f or adults and children. Of the 10 adults enrolled in GED preparation classes, two (20%) successfully completed their studies. (Indicator specified a 50% completion rate).  |  |  |  |
| Evaluation<br>Question<br>(Focused<br>Inquiry) | The key evaluation question examined the effect of home visits on family participation and retention rates. The study findings indicated that families who received two home visits a month participated at a higher rate and remained in the program longer than families who received only monthly or quarterly visits. Families who received more frequent home visits attended an average of 80% of their class offerings (compared to 65% for families visited monthly). All "two-visit/month" families are still enrolled in the program. |  |  |  |

evaluation study. Recommendations may be developed collaboratively by staff and the evaluator, or they may be developed by the evaluator and presented to staff for discussion and modification. Evaluators who involve staff and other stakeholders in developing recommendations ensure maximum ownership of the findings and agreement with any suggested corrective action. Below are qualities that evaluators and project staff should consider in developing their own recommendations for improvement:

- The problem should be well defined and supported by data in the findings section of the report.
- The recommendation should be action-oriented and offer a variety of potential solution strategies.
- Multiyear evaluations should include a progress report on recommendations proposed in previous studies.

# **Enhancing Presentations of Evaluation Findings**

We encourage evaluators to enhance their presentations of findings with visual representations of both quantitative and qualitative data. Tables and figures are effective ways to communicate evaluation findings because pictures of patterns, trends, and relationships help the reader to assimilate information more easily. Visual or graphic forms are also efficient: they can present a considerable amount of data in a limited space. The evaluator should ensure that the visual representations he or she chooses are the most accurate, complete, and effective presentation of the findings. Readers of evaluation reports are cautioned that visual representations, although often pretty and compelling because of their

apparent simplicity, must be used and interpreted with care. The following are general tips for using tables and figures to represent data visually.

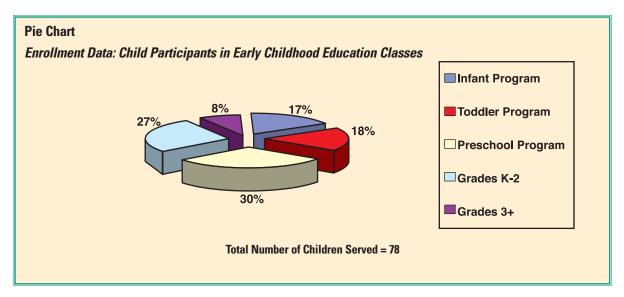
- Consider the nature of the findings and select the most effective type of visual (e.g., tables, charts, or graphs) for presenting data.
- Be selective. Don't overload images with information.
- Prepare the reader by describing the purpose of the tables, charts, or graphs.
- Title the visual clearly and label all rows, columns, sections, etc.
- Indicate the number of participants that the data represent.
- Indicate what the scores represent (e.g., standard scores, percentiles) and include a written interpretation of the data.
- Recognize that visuals alone cannot tell the whole story.
- Recognize the limitations of visuals, e.g., over-simplification of data, selective presentation of findings, which can lead to inaccurate conclusions.

**Using tables to present data.** Tables present numbers or text in rows and columns. Although tables present large quantities of data concisely, they are less valuable for showing trends or illustrating data patterns. Tables are most useful when it is critical that the values are displayed accurately (e.g., differences in pre- and post-test mean scores). For example, in Even Start evaluations, tables can effectively display participant profile data, attendance and retention findings, and results from pre- and post-test assessments. (See sample tables below, in this chapter). To ensure that tables convey all the information necessary for interpreting the data, evaluators are encouraged to include:

- An introductory paragraph describing the table's purpose and the content covered (e.g., the assessment and interpretation of scores);
- A title that includes all pertinent information (e.g., type of data, comparisons of different groups, time period, assessment used, target group represented, number of participants);
- Labels for each column and row; and
- A concluding paragraph that summarizes the key findings and notes the statistical and practical significance of the findings, where appropriate.

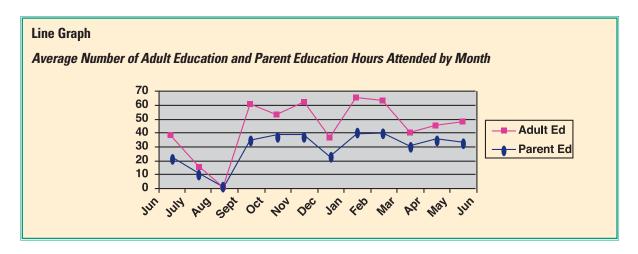
Figures—charts, graphs, or other illustrations—are useful for presenting quantitative or qualitative data visually. Figures are effective because they provide "pictures of the data," making statistical analyses of complex data quickly and easily understood by all audiences. There are three primary forms of figures that evaluators might include in their evaluation reports.

**Pie Charts** show 100% of a variable divided into different parts or slices (of a pie). Pie charts can be used to present quantitative or qualitative data and are most useful for showing the relationship of the parts to the whole. Pie charts can effectively present information about participants and program services.



**Bar Graphs** use the symbol of a bar to display data and show status at different times, such as participants' reading test scores at pre- and post-testing, or different variables for the same time period (reading, writing, math scores at post-testing). Bar graphs are particularly useful for illustrating achievement of performance indicators and displaying analyses that explore comparisons, patterns, or trends in the data. (See example of a bar graph on page 110.)

**Line Graphs** convey information plotted on a graph. Line graphs can show results from two or more variables across time and illustrate trends or changes in the data (e.g., participant attendance by program component).



# **Reporting Data Analyses**

**Reporting participant outcome data.** A key purpose of an Even Start evaluation is to show evidence of participant progress in achieving state and other project-identified outcomes. At a minimum, the evaluation report should present analyses of participant outcomes on state performance indicators. The report should offer statistical analyses of assessment results, reference each performance indicator, and include written comments to help the reader interpret the findings.

108

#### **Example: Participant Outcome Results**

ABE Performance Indicator: Fifty percent of adult learners enrolled in Adult Basic Education classes who achieve a pre-test scale score of 211 or higher on the CASAS Reading and Math Tests will demonstrate a three-point post-test gain in each subject area after a minimum of 100 hours of instruction.

The Comprehensive Adult Student Assessment System (CASAS) reading and math subtests are administered on a pre- and post-test basis to adults who completed a minimum of 100 hours of ABE instruction over the course of the project year. All enrolled students were administered the CASAS pre-tests (n=30); 70% (n=21) completed the reading post-test and 63% (n=19) completed the math. Table 1 shows participants' mean pre- and post-test scores and the percent that achieved the ABE Performance Indicator.

Table 1
CASAS: Analyses of Matched Pretest/Post-test Scores

| Subject | Number | Mean Sca<br>Pretest | led Score<br>Post-test | Mean Difference | Percent Achieving<br>ABE Performance Indicator |
|---------|--------|---------------------|------------------------|-----------------|--|
| Reading | 21     | 237.38              | 243.85                 | +6.47*          | 18 (86%)                                       |
| Math    | 19     | 227.52              | 231.68                 | +4.16           | 12 (63%)                                       |

<sup>\*</sup>Difference is statistically significant (p < .01)

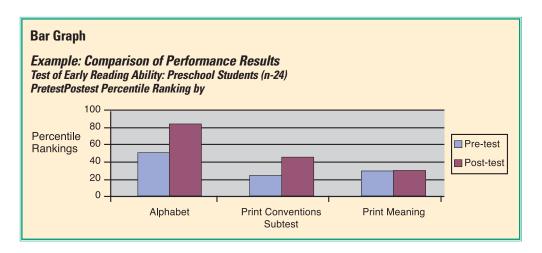
**Summary:** The project met and exceeded the ABE Performance Indicator (86% achieved the reading indicator and 62% achieved the math performance indicator). At post-testing, 14 students scored at the highest level of the CASAS reading test (Advanced Adult Secondary) which suggests that they "can comprehend college textbooks and apprenticeship manuals." The increase in scaled scores from pre- to post-testing is statistically significant, meaning that the difference is not attributable to chance.

Interpretation of Table: Row 1 – Reading. Twenty-one participants were pre-tested on the CASAS reading test and then post-tested after a minimum of 100 instructional hours. The pre-test mean (average) scaled score for these participants was 237.38; the mean post-test score was 243.85. The mean post-test score is 6.47 points higher than the mean pre-test score and the difference between scores is statistically significant. Of the 21 participants, 18 or 86%, achieved the performance indicator of a 3-point gain.

**Reporting supplemental analyses of participant outcomes.** In addition to presenting data specific to the performance indicators and other project-identified outcomes, evaluators are encouraged to analyze the data further to explore patterns or trends. Suggestions for supplemental analyses include:

- Relating outcomes to each other (e.g., analyzing differences in achievement on literacy/language subtests or other areas of development);
- Relating outcomes to program participation (e.g., analyzing achievement patterns based on contact hours or length of enrollment in program);
- Comparing outcomes to previous year's outcomes (e.g., documenting differences in achievement patterns over time);
- Looking more deeply at individual cases to understand larger patterns (e.g., reviewing family case histories to find trends or patterns influencing achievement or lack of progress); and

■ Conducting comparison studies of sub-groups (e.g., participants receiving services from different providers).



**Reporting program participation data: attendance and retention.** Family participation in program services is a critical variable in achieving participant outcomes. As such, it is helpful to include findings describing participant attendance patterns and retention rates in the evaluation report. This section could include analyses of adult and child attendance data for the key program services offered over the project year, the percent of participants who met the project's attendance expectations, and annual family retention rates.

| Example: Participation Data   |
|---|
| Adult Attendance by Component: Median Number of Hours, Range, and Attendance Rate |

| Program                               | Number of    | Median Number | Range of | Average Attendance |
|---------------------------------------|--------------|---------------|----------|--------------------|
| Component                             | Participants | of Hours      | Hours    | Rate*              |
| Adult Education: ESL Parent Education | 33           | 462           | 124-717  | 88%                |
|                                       | 33           | 176           | 77-225   | 75%                |

<sup>\*</sup> Project Attendance Policy: Participants attend a minimum of 75% of their classes in each component.

# Example: Participation Data Number of Families Served: 44 Number of Families Dropped from Program: 16

Reasons why 16 families exited the program prior to attaining their goals.

1) Moved out of the area: N=6 (6 participants or 37%)\*

2) Illness/Mental Health Issues:  $N=5 (31\%)^*$ 3) Reasons Unknown N=3 (19%)4) Poor Attendance N=2 (13%)

\* During the 2002-03 project year, the program recruited families involved in the court system. These families were not sufficiently stable to participate fully in a family literacy program.

**Reporting findings from a focused inquiry.** The findings section of the report should conclude with a presentation and discussion of data that address the key evaluation questions in the focused inquiry for that project year. This section may present more in-depth analyses relating outcome findings to program implementation and/or findings from additional data collection efforts (e.g., survey or interview findings on program implementation concerns, participant perceptions of program services, achievement based on established milestones).

#### Example: Focused Inquiry Results

Key Evaluation Question: **How have parents changed their parenting practices at home to support the development of their children's literacy skills?** 

In individual interviews with the program evaluator, a randomly selected sample of parents (n=15) offered their perspectives on changes in their parenting behaviors. In response to an open-ended question asking parents to describe if they did anything differently at home after having participated in the program, parents reported that they a) read on a daily basis (n=13), b) visited the library more frequently (n=11); c) engaged in interactive reading behaviors (n=10); and d) helped children with homework (n=8). Selected self-reported changes in parenting behaviors are provided below.

"Now I go to the library and I try to read to my children every night. Before, I didn't read at all."

"I don't watch soap operas anymore. Instead of spending one hour watching TV every night, I spend the time playing word games with my girls. We play together and then read books."

"I read more to my daughter. I ask her questions about the books we read. I never did that before the program. Also, I never helped my older child. Now I do homework with him."